Master of Business Strategy and Innovation Management

An Exploratory Study on the Relationship between 'Employee Innovation' and the Rewards System Supporting Innovation; a case study of Medtronic Galway

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Abstract

The aim of this thesis is to explore the relationship between employee innovation and reward systems supporting innovation. The empirical evidence came from a case study in Medtronic, Galway, a medical device company. This study incorporates the literature surrounding innovation and rewards and will attempt to identify a link both theoretically and practically between both.

Chapter 1

1.1 Introduction

Within the context of globalisation, increasing competitiveness and technological advancements, the phenomenon of innovation has emerged as a principle source of competitive advantages in the global business world. In today's knowledge based economy, the success of firms now depends more on employee capabilities, such as creativity and idea generation. Innovation involves the successful implementation of these ideas. Reward systems are a key instrument in modern enterprises. They play an important role in attracting, retaining and motivating employees. This thesis sets out to explore the relationship between reward systems and employee innovation. Gupta and Singhal, (1993) have recognised that in highly dynamic business environments, innovation and creativity have become crucial for creating competitive advantages for the firm. People are the most vital resource of an innovative organisation and all innovation based firms have to learn how to manage, motivate and reward them in order to succeed. The author feels this research will add to the existing body of knowledge based on this subject.

1.2 Background to the Research

The research will involve various aspects of both innovation and rewards subjects. The case study approach will be chosen with particular focus on one of Ireland's largest medical device companies, namely, Medtronic, Galway.

The rationale for conducting research in this particular field is that the medical device sector is an essential part of the Irish economy. It holds a high significance in employment, revenue and exports for Ireland. As of 2008 there was nearly 24,000 people employed in this sector producing exports in excess of six billion euro. (Forfas, 2009). In addition "Ireland has the highest per capita employment of medical technology personnel in Europe". (All Business, 2010). It is evident that the medical device sector is invaluable to the Irish economy and it is driven by innovation.

As well as the above motives for the study the author is also an employee of Medtronic, Galway since 2006.

1.3 Objectives of the study

There are numerous aims and objectives within this research study. There is one key primary objective and three secondary objectives.

1.3.1 Primary Objective

The primary objective is to explore the relationship between 'employee innovation' and 'the rewards system' supporting innovation in Medtronic, Galway.

1.3.2 Secondary Objectives

- To investigate how rewards can lead to increased motivation.
- To carry out an investigation of the rewards system in Medtronic, Galway.
- To identify rewards systems that can promote innovation in the work place.

1.4 Structure of Thesis

This thesis incorporates the following chapters:

- This current chapter has identified specific facts regarding the medical device industry in Ireland. It has highlighted the phenomenon of innovation and the importance of rewards. The rationale for the study has been identified and primary and secondary objectives have been stated.
- Chapter two presents a review of the literature associated with innovation, rewards and motivation.
- Chapter three describes the methodologies used to carry out the research.
- Chapter four illustrates the key findings of the research.
- Chapter five assembles all of the research and compares the data collected with the literature reviewed.

1.5 Conclusion

This chapter has highlighted the theoretical viewpoint of the research undertaken. It has outlined the author's primary objective and provided the rationale for conducting this research. The following chapter will evaluate available research regarding employee innovation, rewards systems and motivation.

Chapter 2

2.0 Literature review

There has been an abundance of literature published in relation to both innovation and reward systems. Many authors have offered diverse definitions of innovation; some have been aimed at particular disciplines while others are more general to different industries. An early definition by (Thompson, 1965) simply states "Innovation is the generation, acceptance and implementation of new ideas, processes, products or services". A similar more recent definition stated "Innovation can be defined as the effective application of processes and products new to the organization and designed to benefit it and its stakeholders". (West, Anderson 1996).

A definition which is widely quoted and offers more detail than most is "Innovation is conceived as a means of changing an organization, either as a response to changes in the external environment or as a pre-emptive action to influence the environment. Hence, innovation is here broadly defined to encompass a range of types, including new product or service, new process technology, new organization structure or administrative systems, or new plans or program pertaining to organization members". (Damanpour, 1996)

Rothwell and Gardiner (1985) offered this definition "Innovation does not necessarily imply the commercialization of only a major advance in the technological state of the art (a radical innovation) but it includes also the utilization of even small scale changes in technological know-how (an improvement or incremental innovation)".

Radical innovation involves completely new ideas. Incremental innovation is where an existing product or service is adapted or modified and the organisation can use it to their advantage.

In a research paper by Baregheh, Rowley, Sambrook, (2009) the authors developed; on the basis of the key attributes of definitions of innovation and the descriptors used by those definitions to characterise the attributes, a diagrammatic definition of 'Innovation' as proposed in Figure 1. The diagram incorporates the six attributes identified as being common to the various disciplinary definitions of innovation. The authors do not suggest that this is the actual or ideal flow, or that the flow is linear. They do not give greater importance to "stages" or "aim" but simply suggest that these are six common, and therefore important, attributes of innovation. The model seeks to present the "essence" of innovation, no matter the organisational or disciplinary context. The six components of the model do not only describe the possible flow of the innovation process, they also indicate various starting points within the innovation process. This might be influenced by disciplinary background. For example, engineers might begin with a focus on the technical possibilities of a new product, whereas marketing specialists might concentrate on identifying potential new markets. Individuals within organisations may choose different starting points on the journey to innovation. The chosen starting point might also have a strong relationship to the way innovation is achieved, or not.

In order to capture and articulate the diagrammatic definition in Figure 1 in words by means of interpretation, we propose that:

Figure 1

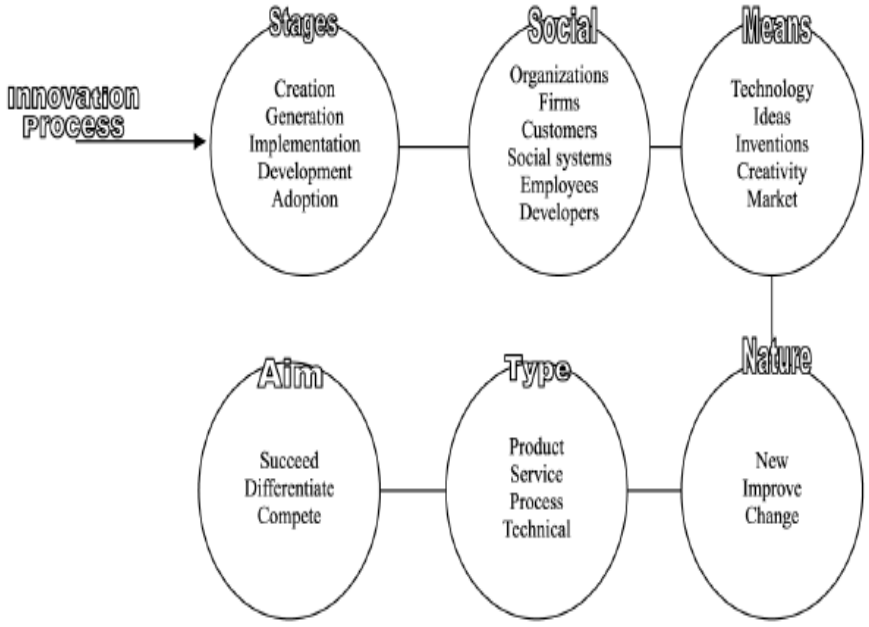


Figure 1.
A diagrammatic definition of innovation

2.1 Innovation

Innovation is an important component of the overall strategy for contemporary organisations. In parallel, strategic human resources management scholars have argued that human resources management practices should help to motivate behaviours and attitudes among organisational employees that will contribute to the successful implementation of the overall strategy. Taggar, Sulsky, and MacDonald suggest that the employee sector they label as the inner core is most critical to the attainment of an innovative sub-strategy goal, and specific human resources bundles should be designed to encourage creative and innovative behaviours among inner core employees. This commentary argues that innovation, as an inherent part of the overall strategy, should be an important goal for all employee sectors, although the nature of their needed innovative behaviour may differ. (Farr, Tran, 2008)

Corporate culture can support innovation through core values and norms that can be shaped with certain features of reward system. The cornerstone of our approach and the relationship corporate culture – innovation -rewards is that those who perform well and in particular the successful innovators receive rapid promotion or successively more challenging assignments what motivates them to repeat the same behaviour in the future. It soon becomes clear to others in the organization that outstanding performance is the surest path to success. Therefore it can be said that there is some relationship among the three terms. Corporate culture is one of the factors that dictate success in innovation. The challenge is how to create the culture that supports creativity and innovation. Corporate culture that supports innovation has several important features where one of them is the tolerance of failure, as even failure is seen as a source of information and therefore not every unsuccessful attempt to act should be punished. Employees are encouraged, compensated and motivated to convert great ideas into new products and services only if failure is incorporated into new initiatives.

The most important value to cultivate in the organizational culture to unleash the innovative power is acceptance of failure as part of the learning and experimentation process. The connection among innovations and rewards will be strongest, if it becomes embedded in the corporate culture to reward each innovation and employee contribution. Practicing performance management and rewarding innovations would

increase the overall rate of innovation in the long run. Innovation must be a part of everyone's job, which can be done only by providing time and resources for employees to experiment and pursue their ideas and not punishing them for failures. (Farr, Tran, 2008)

Innovation can take many forms but it can be reduced to four dimensions of change (the 4 Ps of innovation). Illustrated on Fig.2

- Product innovation- changes in the things (products/services) which an organization offers.
- Process innovation- changes in the ways in which things (products/services) are created and delivered.
- Position innovation- changes in the context in which the products/services are introduced.
- Paradigm innovation- changes in the underlying mental models which frame what the organization does. (Bessant and Tidd, 2007)

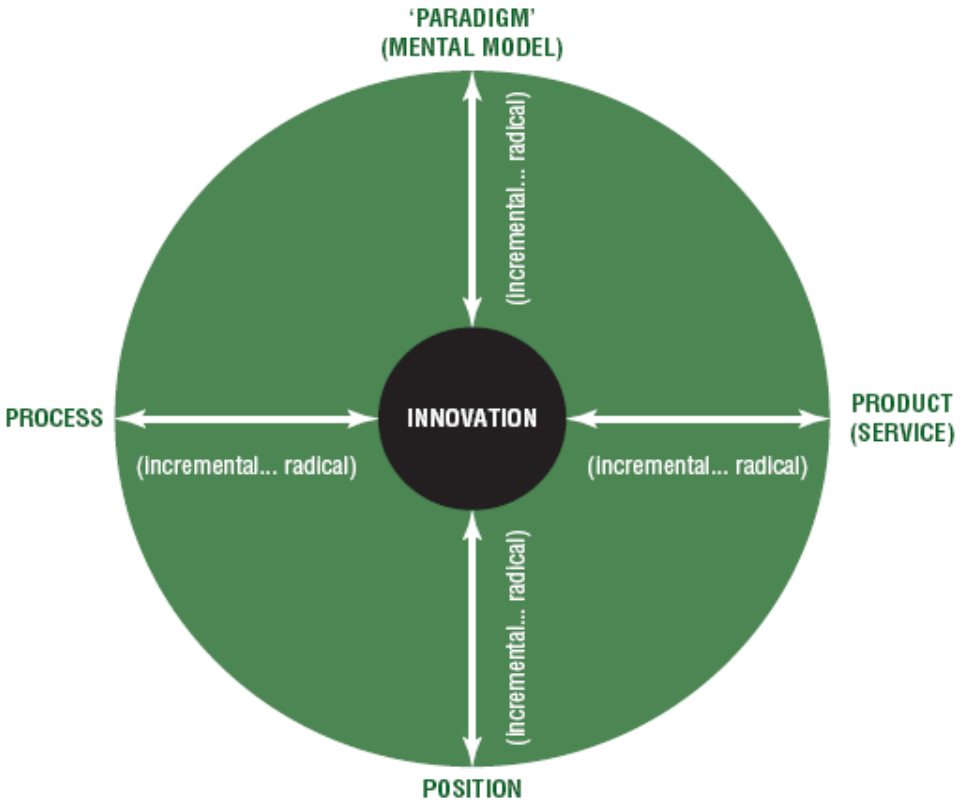


Fig.2

(Tidd, Bessant, 2009)

A champion of innovation at Medtronic has stated "Most people think of big, revolutionary ideas, but to me, innovation is also the many little things we continually do to optimize a product. These innovations aren't always obvious, but they could have a huge impact on the success of our products. For example, we may use a new technology for circuit design to minimize the current our pacemaker circuits need, which allows the device to last longer. Compare a pacemaker to a cell phone; the cell phone is bigger, but the pacemaker will last perhaps seven to 10 years while the cell phone needs to be recharged nearly every day. Small innovations over the past several decades have allowed this to be". (www.medtronic.com)

2.2 Open Innovation

Open innovation is a concept that is being followed by many of the world's leading companies such as Apple, IBM and P&G (What do Apple, IBM and P&G know? 2011).

Open innovation has been defined as "Open Innovation is a paradigm that assumes that firms can and should use external ideas as well as internal ideas and internal and external paths to market, to advance their technology".(Sloane,P, 2011).

The official definition of open innovation is "the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and expand the markets for external use of innovation, respectively" (Chesbrough, 2006)

The authors of an article titled; "What do Apple, IBM and P&G know?" have identified five steps to open innovation:

- Use the first lesson in corporate strategy- define your firm's core competences across all areas.
- Define areas of growth where those competences can be used.
- Define areas where there are gaps in competencies.
- Crucially, don't attempt to fill the gaps yourselves- invite outside agencies to fill them for you.

•Change processes and the culture of the business to allow this to happen, and get buy-in from key stakeholders. (Apple, IBM, P&G)

In another article from 'Strategic Direction' it discusses how Proctor and Gamble aim to source 50 percent of its innovations from outside using open innovation. Early results included new products such as Mr Clean Magic Eraser and Pringles Prints. Kimberly-Clark reduced the time is takes to bring out new products by 30 percent through open innovation. It launched Sunsignals in just six months by collaborating with a smaller company, SunHealth Solutions. Sunsignals is a self-adhesive sensor that changes colour when the wearer is in danger of burning in the sun. Kimberly-Clark partners with over 30 companies including joint-development, joint ventures, co-distribution, and licensing deals. . (Sloane, P, 2011).

2.3 Innovation Models

In a study by Lalit Manral (2011) on the subject "Managerial cognition as bases of innovation in organisation" to propose a comprehensive model of innovation, it was found that some dimensions of managerial cognition influence the important tasks of innovation as identified in a model by Kanter. Kanter defines innovation as "uncertain, fragile, political, and imperialistic micro-processes stimulated by a set of macro-level conditions, where some of the structural and social factors are more important at certain stages than others. The tasks of the innovation process include – idea generation, coalition building, idea realization, and diffusion of the innovation". (Lalit, 2011). Kanter's model (1988) identified idea generation as the first task in the process of innovation. Ideas may be solutions to existing problems, or even solutions looking for problems, which trigger the innovation process. She proposed various structural features in an organization that facilitate the task of idea generation – formal extra organizational ties with users; structural integration across fields to create cross-disciplinary contacts (matrix structure); broader definitions of jobs, incentive structures, etc. She further argues that the generation of new ideas that activate innovation is facilitated by organizational complexity. (Lalit, 2011)

2.4 Importance of Innovation

Innovation is the process by which entrepreneurs convert opportunities into marketable products. In this era of rapid change there tends to be shorter product life cycles. Innovation can take directions such as adjustment, modification, renovation and or product, process or organisation improvements. (Melvin, M., 2011)

The enterprise that doesn't innovate inevitably ages and declines (Drucker, P)

Companies achieve competitive advantage through acts of innovation (Porter, M)

Innovation is not just about opening up new markets it also establishes new ways of serving current and mature markets. (Melvin, M., 2011)

In a study by a consultancy group named Innovaro of companies who were recognised as 'Innovation Leaders' , it was noted that strong links existed between innovation activities and business performance. It's top five firms were Apple, Nokia, Google, Adidas and Reckitt Benckiser- all noted for different but distinctive innovation performance and the increase of their share prices over the year 2006-7 between 25% and 135%. (Tidd, Beasant, 2009)

2.5 Innovative Culture

Creating a culture of innovation involves all members of the organisation. It is believed to mean by many authors to build a culture and associated organizational structures and processes that make innovation a daily way of life. Innovation, by its nature, embraces change because it is the process of change. The innovator uses change as fuel for action and food for thought. Whenever something new happens in the external or internal environment, the innovator sees in it the potential for uncovering new ideas. Regardless of how catastrophic the change, or how adverse it may seem to the organization, it holds the potential for a renewed capability to thrive. (www.innovationtools.com)

Von Stamm, 2008 has outlined practices that managers can carry out to improve an organisation's environment for innovation.

1. Encouragement of a culture of pride- highlight the achievements of the company's own people through visible awards, through applying innovation from one area to the problems of another, and letting the experienced

innovators serve as consultants.

2. Enlarge access to power tools for innovative problem solving- provide vehicles such as R&D committee to support proposals for experiments and innovations- especially for those involving teams or collaborators across areas.

3. Improvement of lateral communications- bring departments together; encourage cross-fertilisation through exchange of people, mobility across areas; create cross functional links, and perhaps even overlaps; bring together teams of people from different areas who share responsibility for some aspects of the same end product.

4. Reduction of unnecessary layers of hierarchy- eliminate barriers to resource access; make it possible for people to go directly after what they need; push decisional authority downward; create 'diagonal' slices cutting across the hierarchy to share information, provide quick intelligence about external and internal affairs.

5. Increased and earlier information about company plans- where possible reduce secretiveness; avoid surprises; increase security by making future plans known in advance, making it possible in turn for those below to make their plans and give people at lower levels a chance to contribute to the shape of change before decisions are made at the top.

2.6 Entrepreneurship

Entrepreneurship is a process activity. It generally involves the following inputs: an opportunity; one or more proactive individuals; an organisational context; risk; innovation and resources. It can produce the following outcomes: a new venture or enterprise; value; new products or processes; profit or personal benefit; and growth. (Lambing, P, A., 2007)

2.6.1 Intrapreneurship

Intrapreneurship's broadest definition is perhaps entrepreneurship within an existing organization. In previous research, intrapreneurship has been defined in several ways: as a process by which individuals inside organizations pursue opportunities independent of the resources they currently control (Stevenson and Jarillo, 1990); as

doing new things and departing from the customary to pursue opportunities (Vesper, 1990); as a spirit of entrepreneurship within the existing organization (Hisrich and Peters, 1998);

Intrapreneurship is defined as entrepreneurship within an existing organization, referring to emergent behavioural intentions and behaviours of an organization that are related to departures from the customary. Intrapreneurial processes go on inside an existing firm, regardless of its size. Intrapreneurship refers not only to the creation of new business ventures, but also to other innovative activities and orientations such as development of new products, services, technologies, administrative techniques, strategies and competitive postures. Its characteristic dimensions are new business venturing, product/service innovation, process innovation, self-renewal, risk taking, proactiveness, and competitive aggressiveness. (Antoncic, B., Hisrich, R D, .2003)

2.7 Reward Systems

Employee reward is about how people are rewarded in accordance with their value to an organisation. It is concerned with both financial and non-financial rewards and embraces philosophies, strategies, policies, plans and processes used by organisations to develop and maintain reward systems. (Armstrong, M. 2002)

Reward systems have become very important in helping to attract and retain employees and also in influencing performance and behaviour at work. Lawler (2000) in his treatise on 'Rewarding Excellence' argues that strategic success is heavily dependent on how well the organisation's reward systems support the organisations strategic intent. Viewed in this way, it becomes obvious that pay, incentives and benefits are of central importance to employees and organisations alike. (Gunnigle, P. et al. 2006)

The three main aspects of the reward package comprise of pay, incentive and benefits.

- Pay refers to the basic wage or salary that an employee receives.
- An incentive refers to the rewarding of an employee for effort that results in higher performance.
- Benefits refer to indirect rewards such as health insurance cover and pension

entitlements. (Gunnigle, P. et al. 2006)

Armstrong (2002) has explained the concept of a reward system as an employee reward system that consists of an organisations integrated policies, processes and practices for rewarding its employees in accordance with their contribution, skill and competence and their market worth. It is developed within the framework of the organisations reward philosophy, strategies and policies, and contains arrangements in the form of processes, practices, structures and procedures which will provide and maintain appropriate types and levels of pay, benefits and other forms of reward.

The following core objectives of a reward package have been outlined by Schuler (1995)

- It serves to attract potential employees: in conjunction with the organisation's human resource plan and its recruitment and selection efforts, the reward package and its mix of pay incentives and benefits serve to attract suitable employees.

- It assists in retaining good employees: unless the reward package is perceived as internally equitable and externally competitive, good employees may potentially leave.

- It should serve to motivate employees: the reward package can assist in the quest for high performance by linking rewards to performance i.e. having an incentive element.

- It contributes to human resource and strategic business plans: an organisation may want to create a rewarding and supportive climate, or it may want to be an attractive place to work so that it can attract the best applicants. The reward package can assist these plans and also further other organisational objectives such as rapid growth, survival or innovation. (Gunnigle, P. et al. 2006)

Reward management has been defined as " Reward management is concerned with the formulation and implementation of strategies and policies that aim to reward people fairly, equitably and consistently in accordance with their value to the

organisation" (Armstrong, Murlis, 2004)

Utilitarianism emphasises extrinsic incentives such as monetary compensation to motivate the innovative behaviour of employee's .In contrast, romanticism views creativity as self-motivated psychological behaviour that is typically sparked by intrinsic spiritual rewards. (Yu, Zhou. et al. 2011)

There are various elements of employee reward;

- Base pay is the fixed salary or wage that comprises of the rate for the job. Pay levels are dictated by many factors such as the economic climate, the state of the labour market, government policy and trade union activities. Base pay can be expressed as an annual, weekly or hourly rate

- Contingent pay is additional financial rewards to base pay. They comprise of a variety of elements such as bonuses, incentives, commission, service related pay and skill based pay.

- Allowances and premiums are also an element of pay in the form of a separate sum of money for such aspects of employment as shift-working, overtime and call outs.

- Employee benefits such as pensions, sick pay, health insurance and company cars. These elements comprise of remuneration which is additional to other forms of cash pay.

- Total remuneration is the value of all cash payments and benefits received by employees.

- Non-financial rewards can consist of achievement, recognition, responsibility and personal growth.

2.7.1 Total rewards

According to a Worldatwork 2006 study 'Total rewards' consists of all of the tools available to the employer that may be used to attract, motivate and retain employees. They include everything the employee perceives to be of value resulting from the employment relationship. There are five elements of total rewards, each of which includes programs, practices, elements and dimensions that collectively define an

organisations strategy to attract, motivate and retain employees. They are compensation, benefits, work-life, performance and recognition and development and career opportunities. These elements represent the 'tool kit' from which an organisation chooses to offer an employee that creates value for both the organisation and the employee. An effective total rewards strategy results in satisfied, engaged and productive employees. Figure 3 illustrates the total rewards strategy

Figure 3.

http://www.worldatwork.org/pub/total_rewards_model.pdf

2.7.2 Job Empowerment

Job Empowerment means both enlargement and enrichment of employee's jobs. Job enlargement makes one's job bigger while enrichment adds some element to the job that is dedicated to increasing the employees' psychological growth.

2.8 Motivation

Many theorists and philosophers believe that employee performance holds the key to business success and there have been continuous efforts to understand the various desires that help to optimise the intensity, quality, efficiency and reliability of performance. It is just as necessary for employees to be motivated as it is to be qualified.

Various definitions of motivation have been expressed over the years, Vroom (1964), views motivation as a process governing choices made by persons or lower organisms among alternative forms of voluntary activity. DuBrin (1978) suggests that motivation centres on the expenditure of effort toward achieving an objective the organisation wants accomplished. (Gunnigle et al, 2002, pg.116)

A motive is a reason for doing something. Motivation is concerned with the factors that influence people to behave in certain ways. Arnold (1991) has listed three components of motivation:

- Direction- what a person is trying to do
- Effort- how hard a person is trying
- Persistence- how long a person keeps trying

Armstrong (2002) has suggested a motivated person is involved in goal directed behaviour. Motivation takes place when people expect that a course of action is likely to lead to the attainment of a goal- a valued reward that satisfies their particular needs. Motivation at work operates in two ways. First, people can motivate themselves by seeking, finding and doing work which leads them to expect that their goals will be achieved. Second, people can be motivated by management through such methods as pay, promotion and praise.

Organisations must ensure to choose employees whose intention and work principles shape with the management approach, organisational environment and reward package. Microsoft Ireland is a good example of motivating their workforce as they were voted "Best Workplace in Ireland" of 2009. A video called "myStoryvideo" was created by Microsoft showing employees giving a tribute of the pride and loyalty they have for Microsoft. They are encouraged to aim high and learn on a daily basis, through this positive view of teamwork and trustworthiness it makes it easier for employees to achieve their goals. Microsoft offers numerous facilities such as gym, massages, reflexology, canteens and activities and games. Morale events and work parties are also organised to boost enthusiasm. These benefits motivate employees to work harder within the workplace which creates a positive impact on maintaining competitive advantage. (Microsoft Corporation, 2009)

2.8.1 Intrinsic motivation

Intrinsic motivation involves the self-generated factors which influence people to behave in a particular way or to move in a particular direction. These factors include responsibility (feeling that the work is important and having control over ones resources), freedom to act, scope to use and develop skills and abilities, interesting and challenging work and opportunities for advancement and growth. (Armstrong, 2002)

In general intrinsic motivations are seen as promoting innovative behaviours more positively and robustly than economic compensation does. (Yu, Zhou. et al. 2011)

2.8.2 Extrinsic motivation

Extrinsic motivation involves what is done for people to motivate them. This includes rewards such as increased pay, praise or promotion and punishments such as disciplinary action, withholding pay, or criticism. (Armstrong, 2002)

Despite the theoretical and empirical evidence indicating the positive influence of substantial economic rewards on the creativity of individuals, disagreement exists over the effectiveness of this approach. Some classical researchers criticise extrinsic rewards because they undermine intrinsic motivations.

Extrinsic rewards, then, may be necessary to stimulate employee creativity or innovative behaviour. But overly generous economic compensations may divert or reduce the intrinsic motivation of employees and hence damage innovation.

(Yu, Zhou. et al. 2011)

Some studies on employee creativity reveal that the use of both intrinsic motivations and extrinsic rewards is beneficial for the entrepreneurial performance of top management teams in small and medium sized enterprises as well as for the performance of technical workers in technology intensive firms. Based on this, then, an interaction effect between intrinsic and extrinsic reward approaches is likely to affect employee creativity positively. (Yu, Zhou. et al. 2011)

2.9 Elements of Motivation

Kressler (2003) has selected a number of points from existing theories and practices regarding elements of motivation that are generally applicable and relevant.

- All individuals hold the key to their own desires, motives and motivation. It is therefore meaningless to say ‘according to Herzberg you should now be motivated’. However, motivation does at least require:
  - Necessity and need (what must be done, will be done)
  - Involvement in action and result
  - Promise of reward and recognition
  - Integration of the activity with personal life and experience
  - Challenging work content and demands.
- In working life just as in life in general a healthy mixture of drama, ritual and routine is important. Drama on its own (struggle, competition, argument, harassment, deadline pressure) is destructive- for some sooner, for others later- because eventually everyone can become burnt out. Routine alone may be comfortable, but eventually it kills all initiative and creativity and thereby takes all joy out of the activity. One can usually identify people who are only occupied in routine work. Ritual, in the sense of unendingly repetitive action that has more ceremonial than productive value, may offer stability and security, but without anything else paralysis, introspection and the quest for *l’art pour l’art* (art for art’s sake) follow quickly. A healthy mixture is thus important. This mixture, however, varies immensely from person to person, a fact that can also often explain different career preferences. Leaving aside the fact that different skills are needed for different jobs, much also depends on individual requirements for drama, ritual and routine. These determine whether someone pursues a career as an international manager, university lecturer, lawyer, business adviser, clerk, salesperson or self-employed businessman. There are clearly certain needs that influence the reasoning behind decisions.
- Management style has a lot to do with motivation. To some extent it is bound up with time and culture. Decades ago an authoritative management style reflected expectations in a strictly hierarchical framework and offered generally stable order and security; today such an attitude would be extremely

counterproductive. In today's world we look for information, cooperation, openness, involvement with decision- making processes, consensus and sharing of responsibility.

- The strong need for personal development and self-actualisation requires that work should not be experienced ultimately as a mechanical process within an incomprehensively huge machine, but as a contribution to business objectives, as recognised performance, as a success and confirmation of personal and professional competence. It in no way contradicts this desire for personal growth that most people also have a need for belonging- to a business, a group or a profession, at least to something that imparts a positive value, including security, status and prestige.

- The importance of reward and recognition for motivation. These terms refer not only to payment or any type of financial remuneration, but to 'rewards' in the broadest sense. These include rewards extending beyond financial considerations, such as career development, increase of knowledge, extension of responsibility, inclusion in important advisory and decision making committees within and also outside the business.

- To conclude, there is an important point concerning organisation structure, in terms of:

    - Definition of areas of responsibility
    - Clarity of role description
    - Transparency of decision making processes
    - Feedback over successes and failures
    - Exchange of knowledge, experience and knowhow
    - Shared learning.

2.10 Rewarding Innovation

Asking employees to be innovative may seem easy enough. But fostering a creative environment and leveraging valuable ideas that result in viable new products and

processes have proven to be quite a challenge.

Research by the American Productivity & Quality Center has found that to drive innovation, organisations must determine what works in an innovation context. How do behaviour, motivation, appreciation, social cohesion and allegiance, engagement and commitment and attitudes and feelings come into play? And how can structured rewards and recognition encourage employees to change their behaviour? The American Productivity & Quality Center (APQC) has found that to drive innovation in products and services, an organisation needs innovative approaches to rewards and recognition. Given that employees have valid needs for achievement, status, and affiliation, organisations are tasked with providing structure and consistency that will motivate employees to pursue creative and effective ideas. In working with APQC member companies and generating research for the upcoming Best-Practice Report Using Knowledge Management to Drive Innovation, APQC has found compelling examples of rewards and recognition from historically innovative organisations. The following examples, can serve as a starting point for creating an environment that encourages innovation. "It requires a blending of creativity with business processes to ensure good ideas become of value to the company, supporting a creative environment requires innovation to be recognized, nurtured, and rewarded.

The study identified the basic principles that leading organisations used to encourage behaviours that can drive innovation through rewards and recognition. It suggested the following:

• Create a design team.

• Consistently acknowledge those who contribute ideas, knowledge, and time. Senior management may recognize innovative design teams and champions, whereas peers typically nominate and recognize teammates for their contributions to the overall effort.

• Provide special recognition to volunteers, change agents, and model innovators. Keep names associated with contributions.

• Disseminate success stories concerning invention of a successful new product or approach.

• Make innovation self-rewarding. Being perceived as an expert by peers and management matters.

• Link innovation to the core cultural values of the organisation. Explain the justification behind rewards and how meeting goals will affect overall and individual outcomes.

• Compile a committee of human resources, knowledge management, research and development, and representatives from business units to develop guidelines and suggestions to encourage innovation.

As with all organisational rewards and recognition, balancing intrinsic and extrinsic motivation is a challenge. In recent studies at APQC, best-practice organisations were more likely to explicitly attempt to motivate for innovation. When an organisation establishes extrinsic rewards for innovation, it must be wary of:

• Attributing more importance to money than it actually has,

• Confusing compensation with rewards,

• Stifling teamwork through individual recognition,

• Ignoring the underlying issues behind behaviours, and

• A reward's decreased effectiveness over time.

Leavitt, P. (2002)

An article in the New York Times by Alfie Kohn consensus with the points above; "Do this and you'll get that." These six words sum up the most popular way in which American business strives to improve performance in the workplace. And it is very popular. At least three of four American corporations rely on some sort of incentive program. Piecework pay for factory workers, stock options for top executives, banquets and plaques for Employees of the Month, commissions for salespeople -- the variations go on and on. The average company now resembles a television game show: "Tell our employees about the fabulous prizes we have for them if productivity improves!" Most of us take for granted that incentives in the workplace are successful. After all, such incentives are basically rewards, and rewards work, don't they?

While rewards are effective at producing temporary compliance, they are strikingly ineffective at producing lasting changes in attitudes or behavior. The news gets worse. About two dozen studies from the field of social psychology conclusively show that people who expect to receive a reward do not perform as well as those who expect nothing. This result, which holds for all sorts of rewards, people and tasks, is most dramatic when creativity is involved. Are rewards as ineffective inside the workplace as they are outside it? Apparently so. Despite decades of widespread reliance on pay-for-performance schemes, I know of no controlled study demonstrating that rewards improve the quality of workplace performance on a long-term basis. (Kohn, A. 1993)

To in still intrinsic motivation, several innovative organisations have encouraged peer recognition, arranged events, and established work structures conducive to cultivating relevant innovations. Yet establishing a structure for rewards and recognition involves more than just following a list of guidelines and principles. Challenges lie in ensuring consistency across an organisation, yet recognizing the needs of different business units. For instance, innovative sales approaches obviously are separate from innovative manufacturing activities. As a result, best-practice organisations develop guidelines instead of an imposing corporate wide approach. Organisations must also thoroughly flesh out the structure to administer the reward system: Who decides who gets recognized? How are innovations defined? In addition to innovators, should enablers be rewarded? For each question, there is a delicate balance of pros and cons. For example, it may seem appropriate to let supervisors determine who should be rewarded. After all, they see who commits effort. But this may encourage employees to conceal problems from the persons who could help them. When supervisors hold control of rewards, employees are less likely to discuss or share failures that can stifle innovation or important lessons. The research suggested not to establish a reward system that will create a fear of failure within the organisation. An organisation cannot create a climate for innovation and knowledge sharing without finding a balance between intrinsic and extrinsic motivators for its employees. "If intrinsic motivation declines, it will take more and more extrinsic rewards to maintain the behaviour. And competition for rewards may negatively impact teamwork." Some organisations have found that recognizing

individual achievement is critical for them. Especially when a project involves an extended time frame, recognizing and encouraging innovative behaviour must come well before revenue is realised. Organisations operating under the mantra that justice delayed is justice denied often create a close proximity between behaviour and rewards. "For best-practice organisations such as NASA and Millennium Pharmaceuticals, a project, whether it is space exploration or taking a drug to market, can occur over decades. It is important for these organisations to recognize their experts at the time of the accomplishment.

APQC has found at many historically innovative organisations that extrinsic rewards can actually impede innovation. "As extrinsic motivation - or the perception by the person that they are acting because of extrinsic motivation - increases, intrinsic motivation can decline". Additionally, focusing on monetary rewards as extrinsic motivators can add further complications. Issues arise when you attribute more importance to money than it actually has and make money more prominent than it needs to be." Instead of monetary rewards for innovators, 3M relies primarily on peer recognition to encourage innovation.3M wants to avoid employees hoarding new ideas and failing to collaborate. Instead, 3M employees share ideas for peer recognition. This recognition includes the Technical Circle of Excellence award in which innovators, selected by co-workers, receive a trip to the company retreat in Minnesota. For technical promotions, the ability of somebody to work with others inside and outside their laboratory is very much a part of the promotion criteria, especially at the higher levels. "In addition to peer recognition, 3M celebrates success stories and propagates tales of innovation and contribution. The stories about great inventors, such as Art Fry, become legends at 3M.

Bringing people together through formal events who would not normally meet is a great way to foster connections that can lead to innovation," said APQC President Carla O'Dell. To inspire innovation, the World Bank holds programs called knowledge fairs as learning opportunities. "The knowledge fairs provide an opportunity to create relationships that build social capital across projects, disciplines, time and geography. A fair called the Development Marketplace provides a venue to seek new ways of addressing poverty. This fair holds a competition, initially between staff and now open to anyone, to develop innovative ways to fight poverty. In 2002 the competition resulted in 2,400 entries with 204 finalists, and

more than 40 of the suggested programs were funded. The World Bank also uses extrinsic incentives to foster innovation. The innovation and development marketplaces reward outstanding creativity (of both staff and other organisations) in addressing poverty. From these extrinsic rewards to generating enthusiasm through knowledge fairs, the World Bank has patiently shifted the culture to understand that innovation is as important as other work.

At innovative organizations, APQC has found that time must be established in the work structure for innovation. If employees feel they have to take time away from ostensibly more important work, they won't. Contrary to popular belief, people do not always work best under pressure and need time to reflect. In addition to senior management, it is critical that direct supervisors are supportive of such a work structure. At 3M, laboratory employees operate under a "15 percent rule." The company allows employees to spend 15 percent of their time on any idea that could benefit 3M. This time is not tracked, but the rule is embedded in the culture; it is seen as a symbol of the freedom and encouragement to generate and develop new ideas, rather than an entitlement of time. 3M supervisors are instructed to respect the concept. 3M also supports innovation with small grants. Both of these programs represent a second chance to fund a project if an idea is not originally approved for development. The two programs represent approximately $1 million out of the total $1.1 billion budget for research and development.

To foster an innovative culture approaches such as formal events, peer recognition and embedding innovation in a work structure can lead to a dynamic cultural shift: innovation is aligned with the overall goals of the organisation. Rewards and recognition, specifically balancing extrinsic and intrinsic incentives, influence how employees approach their responsibilities. With encouragement and a clear explanation of innovation's place in daily activities, organisations can prosper from their most important resources: their employees. (Leavitt, 2002)

Chapter 3

3.0 Research methodology

3.1 Introduction

The purpose of this chapter is to identify the methodology used by the researcher to address the study. This chapter reveals the research methods that were used; how the study was carried out and the research tools that were used.

The aim of this study was to explore the relationship between employee innovation and the rewards supporting innovation. Carrying out this study posed certain difficulties. No study (to this author's knowledge) has been conducted into the relationship between innovation and rewards. This meant that exploring new knowledge would prove a very complex and tedious task. Also due to the unknown nature of the topic it was crucial to formulate a research design that was sufficiently flexible to elicit all relevant information. The main aim of the research is to explore the relationship from both a theoretical and practical viewpoint. The literature review revealed many insights in both innovation and reward paradigms. Through open ended interview I sought to gain a deep understanding of the complex rewards systems and how innovation is managed at Medtronic, Galway. Therefore the issue of research methodology is important to any study. Appropriation between research paradigm, type of data and collection methods has significant implications upon the research findings.

The target population to complete the study is that of Medtronic employees based on the Galway site. The researcher has been requested by the 'Total Rewards' team at the Galway site to carry out research on the relationship between 'employee innovation in the work place and rewards system supporting innovation.

The method that will be used to obtain the required information will be cluster sampling. Cluster sampling is a sampling technique where the entire population is divided into groups and a random sample of these groups are selected. For this study departments will represent groups. Departments can be identified as manufacturing, engineering, and administration. A sample of all departments will then be chosen at

random so that all individuals in those departments could be included in the sample.

The research question will require a combination of both primary and secondary research. There is currently a substantial collection of secondary resources available relative to both employee innovation and reward systems. In order to investigate the relationship linking employee innovation and reward systems the researcher will carry out primary research. The researcher will be preparing a questionnaire that will be distributed to departments at Medtronic.

3.1.1 Research Philosophy

A research philosophy is a belief about the way data about a phenomenon should be collected and analysed (Levin, 1988). Different philosophical perspectives used to interpret an event appear to be problematic for natural scientists as elsewhere (May, 1997). To interpret and understand the world we are living, we certainly need 'ways of viewing' and 'ways of interpreting' to grasp the surrounding facts, ideas, and events. The social world, therefore, can be interpreted and understood via many schools of thoughts. In whatever manifestation, for a theoretical model to explain anything there must be an appropriate relationship between the statements made, the methods used to make such statements, and the philosophical perspective deployed to inform the methods (Abbott, 1998). In each of these respects, there are issues pertaining to ontology, epistemology, and methodology. Ontology is concerned with the nature of reality. Its central question is whether social entities can, or should, be considered social constructions built-up from the perception and action of social actors. Epistemology, on the other hand, concerns what constitute acceptable knowledge in an area of study.

The key epistemological question is "can the approaches to the study of the social world, be the same as the approach to studying the natural sciences?" (Saunders *et al* 2007, p.108). Epistemology provides the philosophical underpinning – the credibility – which legitimises knowledge and the framework for a process that will produce through a rigorous methodology. In summary, ontology is 'being', epistemology is 'knowing', and methodology is 'studying'.

In behavioural sciences, the positivist posits that human behaviours can be explained and predicted in terms of cause and effect (May 1997). Positivists believe that the collection of data has to be performed in the social environment and involved

reactions of people to it (May 1997). Principal positivist methods consist of observations, experiments and survey techniques, and often involve complicated statistical analysis in order to generate the findings and to test hypotheses empirically (Schiffman and Kanuk 1997). The main aim of the positivistic researcher is to generalising the results to the larger population, 'the deductive approach'. To put it more simply, the positivistic, deductive approach implies that the theory must be first generated and then tested by empirical observations. If the theory is falsified, it has to be rejected, and a new one formulated to replace it.

Another research paradigm is critical realism which views the world in terms of three components: the reality, the actual, and the empirical. According to Sayer (2000), the reality concerns that which exist regardless of whether we understand it or whether we have experience of it. It is realm of objects, their structure and power and can exist even we have no experience of the results or lack of empirical evidence. The actual refers to the outcome when the structure and powers of the real are activated. And, the empirical refers to the domain of experience. The difference between this paradigm and positivism is that critical realists distinguish between the actual and the real. In exact word, the actual is not a complete representation of the real. With research questions and objectives in mind, it is clear to certain degree that this research is positioned on a continuum towards the positivistic perspective rather than on the interpretive perspective.

To summarise, the ontological position of this study is that reality exists outside a researcher's mind. This research is based on the belief that there exists a real physical world beyond our knowledge and comprehension. Moreover, there also exists a social world that is being constructed, shaped and influenced by our life experiences, knowledge and desire. Thus, this study positions itself on 'critical realism' perspective, hence taking the position that one can only understand reality to a limited extent; no one can obtain the entire picture of a studied phenomenon. Therefore, reality can be studied to a certain extent and generalisations can be made with a degree of probability.

3.2 Research Design

The research design is an important part of the research project as it illustrates the

method that will be used in order to answer the research question. Saunders et al. (2007) define the research design as "the general plan of how you will go about answering your research question". Another more detailed definition encompasses all the essentials of research design "Research design is the plan and structure of investigation so conceived as to obtain answers to research questions. The plan is the overall scheme or program of the research. It includes an outline of what the investigator will do from writing hypotheses and their operational implications to the final analysis of data. A structure is the framework, organisation, or configuration of the relations among variables of the study. A research design expresses both the structure of the research problem and the plan of investigation used to obtain empirical evidence on relations of the problem". (Blumberg, 2008)

3.3 Qualitative Research

It became clear from early on that this study would be qualitative in nature. It was obvious that quantitative research would be inappropriate as the aim of the research was to explore a complex and under-researched topic. Also a quantitative approach leaves little or no room for flexibility, something that was very important for the research. Qualitative research is a staple form of research of the social sciences, politics and economics, all subjects closely linked with business. It is a descriptive, non-numerical way to collect and interpret information. (White, B. 2007). Qualitative research methods use primary sources of data such as interviews, Questionnaires and observation. It is used to obtain an understanding of individual's thoughts, feelings, opinions and concerns on a particular subject. The interview is probably the most commonly used qualitative technique. It allows the researcher to produce a rich and varied data set in a less formal setting. The interview technique differs from questionnaires in the nature of its questions and its manner of presentation. Questionnaires are useful for asking very specific questions while interviews allow a more thorough examination. When both interviews and questionnaires are used simultaneously the interview provides a pilot for formulating relevant questions and the questionnaire ensures a larger sample size and data can be analysed. (Kitchin, R. & Tate, N.J., 2000, Pg. 213).

The case study approach was chosen as the most appropriate method. The case study is often used in order to analyse the complexity and particular nature of a case (Bryman and Bell, 2003). Thus it became clear that the case study would be the best research method to satisfy the research demands. Yin (1984) has defined the case study as an empirical enquiry that investigates a contemporary phenomenon within its real life context; when the boundaries between phenomenon and context are clearly not evident; and in multiple sources of evidence are used.

3.4 Data Collection

The data collection methods are a fundamental part of any research design (Sekeran, 2003). It is of the utmost importance that data collection methods are chosen on the basis of the research question.

There are several tools one can utilise in case study research in order to elicit information. Surveys, interviews, questionnaires, documentation review and observation are the predominant ways in which data is gathered. For the purpose of this study it was decided to use interviews, questionnaires and documentation review.

The empirical data was obtained through both interviews and random sampling. Survey questionnaires were sent randomly to employees at Medtronic. The researcher employed the services of 'survey monkey' to develop the questionnaire. The internal mail system within Medtronic was used to deliver the survey. A total of 20 questionnaires were distributed among different departments, with a return rate of 75%.

3.4.1 Interviews

According to Saunders et al (2007) careful planning is the key to a successful interview. The researcher deemed it crucial that all interviewees were sufficiently aware of the topic under investigation so that the researcher could draw out the most informative response. Each interviewee was given a brief outline of the area and an inclination as to the questions being asked. Interviews were also conducted in their own Medtronic offices which made interviewees comfortable and more susceptible

to sharing important information.

Research involved having a number of in-depth semi structured interviews with members of the 'Total Rewards' and 'My Ideas' departments at Medtronic Galway. Validity is often a cause for concern with in-depth interviews due to their lack of structure (Saunders, 2007). In order to counteract this, the interviews were semi structured. The semi structured interview aids in achieving the rich data necessary in this study and in the comprehension of complex issues (Sekeran, 2003). Ideas that may be difficult to articulate can become evident and discussed further within the interview itself. In depth interviews also allow for extensive probing of motivations, attitudes and beliefs (Domegan and Fleming, 2003) something which was imperative to the study. All interviews were recorded for further analysis later on.

The questioning process will begin with general questions in order to make the interviewees feel relaxed and their confidentiality ensured. This will then be followed by more specific questions in order to attain important information. Questions will be posed in a simple, easy and short form with little use of jargon so as to make them easily understandable for interviewees. They will be put forward in a gentle way so as to elicit the most comprehensive and concise answers. There will be openness to the interviews so that interviewees can express all of their thoughts clearly and thoroughly without feeling restricted in their responses.

When conducting the interview for this study the author selected a semi-structured interview. The researcher interviewed David Morris from the *Total Rewards* team at Medtronic. The process employed for the interview involved the researcher preparing guide questions that were used to direct the interview. The advantage of engaging in a semi-structured interview is that there is a pattern that ensures all data is covered while also allowing for flexibility which permits the interviewer to probe deeper into certain areas as the interview progresses.

The researcher perceives he may encounter difficulties in obtaining primary research. Qualitative research is a method of inquiry used in many studies. Qualitative researchers aim to gather an in-depth understanding of human behaviour and the reasons that govern such behaviour. Qualitative methods produce information only on the particular cases studied, and any more general conclusions are only hypotheses. Also for primary research it is possible that surveyed people may spoil

the sample with unanswered questions.

3.4.2 Questionnaire Development Process

Questionnaires have been defined by deVaus as “a data collection technique in which each person is asked to respond to the same set of questions in a pre-determined order”. (deVaus, D.A., 1991). This form of research tool is popular as it gains a wide opinion of a topic. Questionnaires connect with both positivistic and phenomenological methodologies as it consists of a list of questions and the answers are documented by respondents.

3.6 Credibility of Research Findings

Sproul (1995) believes that an instrument should not be used if it does not measure what it is supposed to measure, accurately. In this research the researcher examined the construct validity of the data collection methods. Saunders et al (2007) define construct validity as the extent to which the questions actually measure the constructs which they are intended to measure. Thus all questions were examined with a view to the information they generated and how this information completed the research objectives.

Internal or content was also examined to make certain that it actually measured what it intended to measure. In order to do this, questions were examined in relation to the objectives of the study

Reliability is described as “the degree to which an instrument measures the same way each time it is used under the same conditions with the same subjects”. Strengthening the reliability of one’s research can reduce errors (Sekeran, 2003) and increases the credibility of the research. To guarantee consistency and reliability of the in-depth interviews, they were kept as consistent as possible by following the interview guidelines.

3.7 Ethical Consideration

The research for this thesis was performed in an ethical manner as the researcher was trusted with both information and data. “ Research ethics are concerned with the

extent to which the researcher is ethically and morally responsible to her/his participants, the research sponsors, the general public and his/her beliefs" (Kitchin, R. & Tate, N.J., 2000, Pg. 35).

Ethics is applicable to those who accumulate the data and those who offer them the data. The confidentiality of respondents is necessary and the researcher should respect the privacy of the data collected and ensure information will not be released outside of this study. In this research the ethical standards were adhered to as the anonymity of respondents was concealed and any other information which would identify the respondents was not documented. It is crucial for the respondents to be honest and truthful in the information they offer while also avoiding falsification of the data given.

3.8 Limitations of the Research

No study is complete without certain limitations and this thesis is no different. Firstly this research used the case study method which frequently comes under criticism for not being able to offer generality to findings. This thesis intensely reviewed the human resource management practices in Medtronic in order to enhance the generality of the findings. Despite this, further qualitative and quantitative research may be needed in order to accomplish a firmer standing.

As this was a case study it involved a number of in depth interviews and surveys. The aim was to elicit information on both the framework within Medtronic and employee views. It is possible however due to the small sample size certain important aspects were possibly omitted. To counteract this, the interviews were semi structured however only further research will be able to confirm the findings.

3.9 Summary

This chapter illustrated how the research objectives were achieved. The structure of the research methods and the approaches that were implemented were defined and reasons were given as to why they were suitable to this study. The selected research design which was chosen was a case study approach. The primary research was discussed regarding the methods used, when and how it was conducted. The following chapter will outline the findings of the data gathered.

Chapter 4

4.0 Findings

4.1 Introduction

The purpose of this chapter is to reveal the information that was obtained during the research process. This chapter begins with background information regarding Medtronic and its evolution in Galway.

4.2 Profile

Medtronic was founded in 1949 in Minneapolis, Minnesota, USA, by Earl E. Bakken and Palmer J. Hermundslie. Today Medtronic does business in more than 120 countries and employs 38,000 people worldwide. The World Headquarters is in Minneapolis, Minnesota. Regional Headquarters include Switzerland and Japan

Medtronic is a medical device manufacturing company. One of its European plants is located at Parkmore Business Park West, Galway. It has been established in Galway since 1999 following a merger with AVE. Prior to this merger AVE had acquired CR Bard which was the original company on the site. The devices which are manufactured are used for alleviating pain, restoring health and extending life for millions of people around the world (www.medtronic.ie). They manufacture Drug coated stents, stent catheters, balloon catheters, CRDM kits and Endovascular devices for the treatment and management of cardiovascular and cardiac rhythm disease.

Medtronic is one of the largest employers in the medical industry in Galway with over 2,200 employees on the site. The management at the Galway plant have acknowledged time and again the importance of new product development and have highlighted how critical it is in the future of the Galway operation.

Medtronic Galway can now boast being Medtronic's global manufacturing centre of excellence for drug eluding stents and a variety of catheters. The Galway plant has evolved due to a competent, well educated and capable workforce under an innovative management.

"The Medtronic organisation in Galway has gone from strength to strength. Today,

the site is one of the leading Global Manufacturing and Technology Development Centres within the corporation. Our success to-date is down to the core competencies and capabilities of our people and our relentless drive for excellence in everything we do. The core of the Medtronic Mission is to apply biomedical engineering to alleviate pain, restore health and extend life for millions of people each year, through our products and therapies. At the Medtronic Galway Site, all our employees are deeply committed to the Medtronic Mission and we take great pride in knowing that our contributions have such a positive effect on the lives of patients all over the world". Gerard P. Kilcommins, Vice-President of Global Vascular Operations & General Manager Galway Site. (IDA, 2011)

“Every five seconds, somewhere in the world, a person’s life is saved or improved by a Medtronic product or therapy” (IDA, 2011)

Medtronic, Galway, has consistently been voted in the top 50 Best places to work in Ireland. It has been recognised by its employees for demonstrating exceptional commitment to attitudes and policies that make the organisation a great place to work. In 2010 it ranked number 10 and in 2011 it came in at number 14.

Expressing her delight at Medtronic's inclusion in Ireland's Great Places to Work, Human Resources Director, Dorothy Kelly, said "We could not have won this award without the enthusiastic support of our employees. They are the ones who make Medtronic a great place to work with their unique talents and skills, dedication to supporting our goals and strong commitment to excellence in everything that they do". (Galwayindependent.com. 2011)

4.3 Overview of Innovation System

It became clear during the course of the research that Medtronic place a high amount of time and resources on developing an effective innovation system.

The innovation system within Medtronic has evolved in recent times. David Morris (Total Rewards) outlined the reasons why the innovation system evolved:

“Essentially the system needs to evolve on an ongoing basis in order to satisfy business needs. The leader has been Gerry Kilcommins the general manager of the Galway site, his adage has been “the operator knows the process best and their

contribution will add most value to the system". David Morris also outlined that top management do recognize that "innovation is a core behavior- and it is key to achieving business success".

Morris also stated that a high emphasis is placed on developing a culture of continuous improvement via tools such as 'lean sigma'. He also referred to the application of an empowerment culture where "employees are empowered to improve their working environment and the environment of their co-workers".

Management has employed a strategy based on empowerment "we have focused on removing layers between management and employees, this involves sharing information, giving more responsibility and power and rewarding their ideas, this has allowed employees to take more initiative and has helped solve problems.

Management has engaged with employees through a bottom up approach. The site has a 'My Ideas' outlet which can be accessed by all employees through their own personal internal mail system. The 'My Ideas' model has encouraged all employees to put forward their ideas. In addition management also engage through focus groups and team meetings.

Morris also explained that training and resources were made available throughout all departments on various process improvement and problem solving tools.

4.4 Overview of Rewards System

Morris outlined an overview of the Medtronic rewards system. He stated "we employ a total rewards philosophy which comprises of pay, benefits, incentives and recognitions aspects. The aim of base pay is to pay employees fairly by reviewing market data; the aim of benefits is to attract and retain employees and look after their wellbeing. We also have a Medtronic incentive plan (MIP), which is an incentive for all employees to meet company financial goals, this is paid annually. Recognition: consists of a bonus to reward employees for demonstrating desired behaviours such as innovation and results orientation, these are awarded any time after the behaviour. There is also a career development pathway which is used for motivating employees.

The reward system has evolved in recent times "Managers are now being given more tools to reward employees such as recognition awards" through the new 'Recognize'

program. The company has also moved to a system of fair pay from performance related pay.

“If you asked me what the future holds for reward systems- I would say more manager discretion in granting awards, more team based rewards and more on the spot awards. Going forward I also believe there will be a greater connection between employee actions/behaviours and rewards.

For FY11 there will be a 1% market adjustment for every employee, however, how will we reward people who have done an exceptional job?

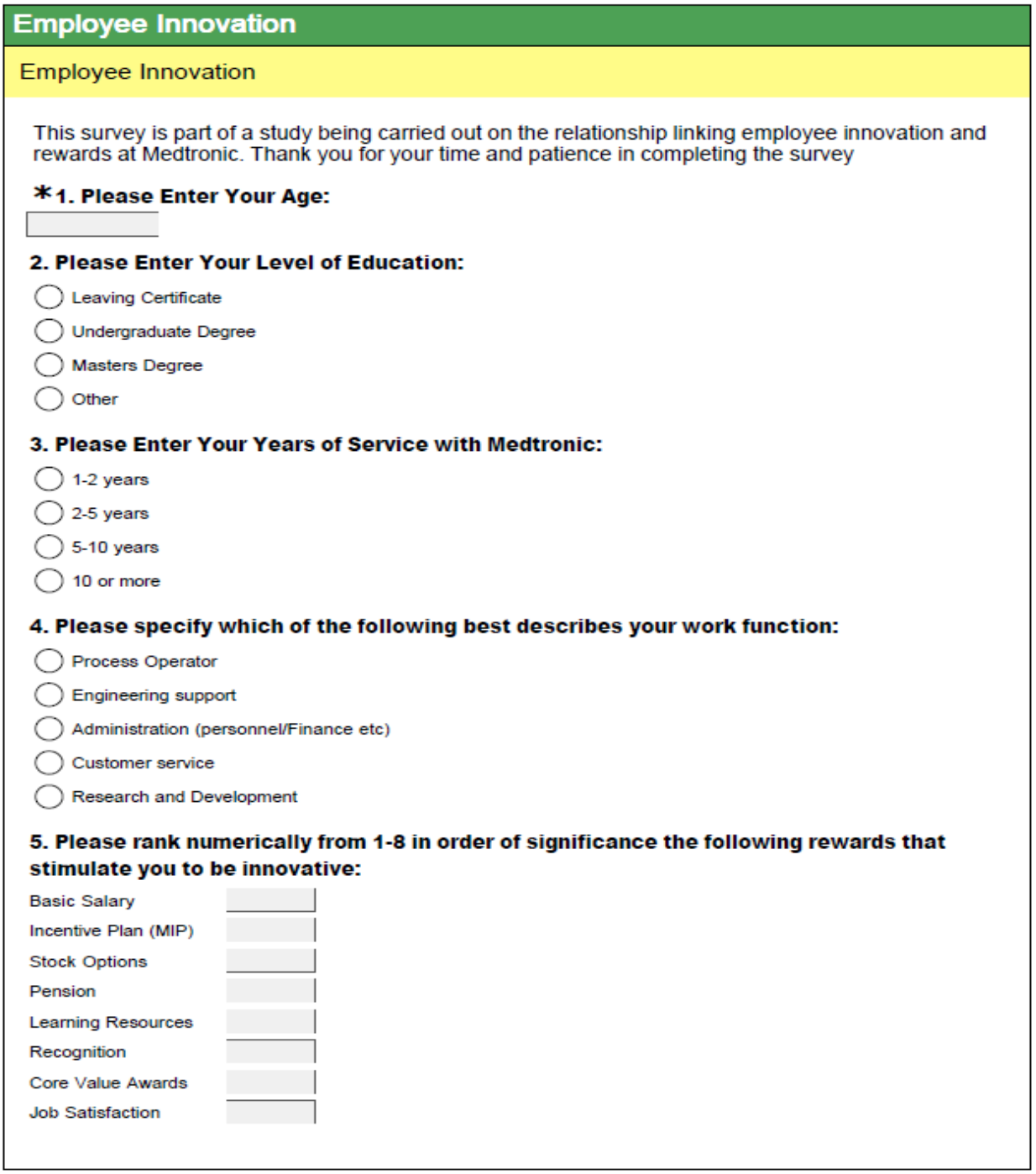
In research we have carried out, including feedback from Medtronic employees, it shows that differentiating salary merit increases is not an effective way to deliver pay for performance. It is more important that salaries are competitive and equitable. The 1% market adjustment provides a simple method for base pay to remain competitive with the local market and market values. An additional adjustment pool will be used to ensure competitive pay by delivering an additional increase to employees who exceed objectives and whose base salary is low relative to peers or the market. In FY12, reward programs will focus on rewarding for exceptional contributions instead of delivering rewards through a rating system.

As eluded to earlier, in addition to the special adjustment budget, managers have a broad array of tools available to them to recognize performance. These include our new global recognition platform, ‘Recognize’, core behavior awards, promotional opportunities, development opportunities and flexible work initiatives such as mytime.

4.5 Employee Questionnaire

The questionnaire that was distributed through survey monkey is located below

Figure 4. Survey Monkey Questionnaire.



Employee Innovation

Employee Innovation

This survey is part of a study being carried out on the relationship linking employee innovation and rewards at Medtronic. Thank you for your time and patience in completing the survey

***1. Please Enter Your Age:**

2. Please Enter Your Level of Education:

- ◯ Leaving Certificate
- ◯ Undergraduate Degree
- ◯ Masters Degree
- ◯ Other

3. Please Enter Your Years of Service with Medtronic:

- ◯ 1-2 years
- ◯ 2-5 years
- ◯ 5-10 years
- ◯ 10 or more

4. Please specify which of the following best describes your work function:

- ◯ Process Operator
- ◯ Engineering support
- ◯ Administration (personnel/Finance etc)
- ◯ Customer service
- ◯ Research and Development

5. Please rank numerically from 1-8 in order of significance the following rewards that stimulate you to be innovative:

Basic Salary	
Incentive Plan (MIP)	
Stock Options	
Pension	
Learning Resources	
Recognition	
Core Value Awards	
Job Satisfaction	

Employee Innovation

6. Please State which of the following words best describes you at work:

- ◯ Innovative
- ◯ Creative
- ◯ Intrapreneurial
- ◯ Compliant

7. Please indicate your level of agreement or disagreement with each of the following statements:

	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
My workplace allows me to express my creative side	◯	◯	◯	◯	◯
It is easy to be innovative in my job	◯	◯	◯	◯	◯
There is a strong culture of innovation within the company	◯	◯	◯	◯	◯
Innovative actions are always rewarded	◯	◯	◯	◯	◯

8. Do you think that there is sufficient training in place to foster an innovative environment?

9. Have you ever used the 'My Ideas' tool and if so how many times.

- ◯ Never
- ◯ Once
- ◯ Twice
- ◯ 3 or more times

Employee Innovation

10. What reccommendations would you make to improve the Innovation system at Medtronic.

4.6 Questionnaire Results

Question 1 of the survey requested participants to enter their age. The following was the break down of the 15 respondents. Figure 5.

0% were between 21-25
45% were between 26-30
22% were between 31-35
24% were between 36-40
9% were between 41-45

Question 2 asked the respondents to enter their level of Education. Figure 6 below illustrates the breakdown of education among them.

Employee Innovation

SurveyMonkey

Please Enter Your Level of Education:

	Response Percent	Response Count
Leaving Certificate	13.3%	2
Undergraduate Degree	26.7%	4
Masters Degree	**33.3%**	**5**
Other	26.7%	4
	answered question	**15**
	skipped question	**0**

Question 3 requested respondents to enter their years of service with Medtronic. Figure 7 below illustrates the results.

Employee Innovation SurveyMonkey

Please Enter Your Years of Service with Medtronic:

	Response Percent	Response Count
1-2 years	0.0%	0
2-5 years	13.3%	2
5-10 years	**53.3%**	**8**
10 or more	33.3%	5
	answered question	**15**
	skipped question	**0**

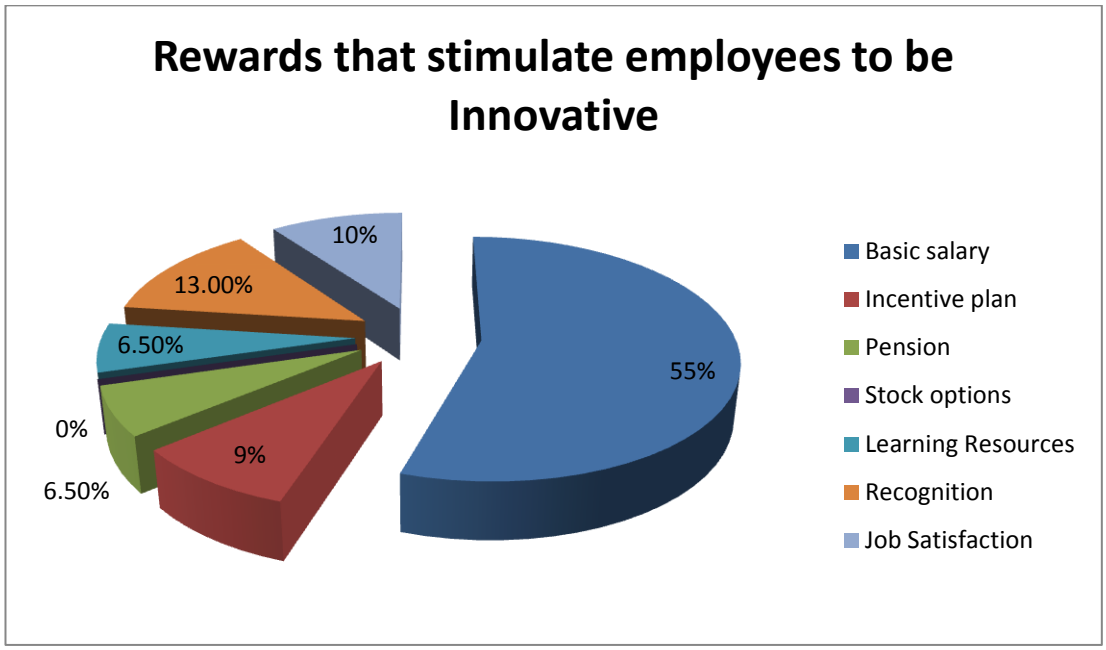
Question 4 asked respondents to specify which of the following best describes their work function. Figure 8 illustrates.

Employee Innovation SurveyMonkey

Please specify which of the following best describes your work function:

	Response Percent	Response Count
Process Operator	26.7%	4
Engineering support	**40.0%**	**6**
Administration (personnel/Finance etc)	26.7%	4
Customer service	0.0%	0
Research and Development	6.7%	1
	answered question	**15**
	skipped question	**0**

Question 5 asked respondents to rank numerically from 1-8 the significance of the following rewards to stimulate them to be innovative. The results are illustrated below in Figure 9.



Question 6 asks respondents to state which word from the list best describes them at work. Figure 10

Employee Innovation

SurveyMonkey

Please State which of the following words best describes you at work:

	Response Percent	Response Count
Innovative	33.3%	5
Creative	6.7%	1
Intrapreneurial	13.3%	2
Compliant	**46.7%**	**7**
	answered question	**15**
	skipped question	**0**

Question 7 asks respondents to indicate their level of agreement or disagreement with statements. Figure 11

Employee Innovation

SurveyMonkey

Please indicate your level of agreement or disagreement with each of the following statements:

	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	Response Count
My workplace allows me to express my creative side	20.0% (3)	**40.0% (6)**	20.0% (3)	20.0% (3)	0.0% (0)	15
It is easy to be innovative in my job	6.7% (1)	**73.3% (11)**	0.0% (0)	20.0% (3)	0.0% (0)	15
There is a strong culture of innovation within the company	13.3% (2)	**80.0% (12)**	6.7% (1)	0.0% (0)	0.0% (0)	15
Innovative actions are always rewarded	0.0% (0)	**53.3% (8)**	20.0% (3)	26.7% (4)	0.0% (0)	15
					answered question	**15**
					skipped question	**0**

Question 8 asked respondents "do you think that there is sufficient training in place to foster an innovative environment. Below is a selection of the answers received

- It depends on the manager- some people are here so long they just want more of the same- however there are some who are open to ideas.
- There is potential for more work in this area
- Yes, but there is more potential for further work in this area.
- There is potential for more work in this area
- I have never undergone specific training in relation to innovation

Question 9 asked respondents if they ever used the 'My Ideas' tool and if so how many times. Figure 12 illustrates the results.

Employee Innovation

SurveyMonkey

Have you ever used the 'My Ideas' tool and if so how many times.

	Response Percent	Response Count
Never	42.9%	6
Once	28.6%	4
Twice	0.0%	0
3 or more times	28.6%	4
answered question		14
skipped question		1

Question 10 asked respondents "what recommendations would you make to improve the innovation system at Medtronic. Below is a selection of responses.

- Put operators working on a new product for a few days before paper work is complete to allow changes to be made from feedback, quickly and easily.
- Listen more to the operators before implementing changes.
- Having a link between the submission and the MIP would be a good incentive for people to think more about innovation. Having time set aside quarterly with your group to discuss potential innovation
- Respect every voice- while it is not feasible to explore all ideas as they are presented, there are many opportunities overlooked because a different idea (not necessarily a better idea) may have been presented stronger
- More interactive workshops in the auditorium
- I feel everyone is encouraged to be innovative at work already

- If you are innovative provide the resources and the backup to support you to complete through to the end in addition to day to day activities. Often there is no time to be innovative or to implement new ideas due to day to day constraints. Foster the culture that innovation does not mean extra work or all the work for the person who comes up with the idea

- My Ideas is not a good system as all cannot get into it- collaboration of ideas is what is important and if ideas were posted up on a quick wiki links website on sitebuilder people could build on the ideas and add to them- a bit like what is happening with the mix sites etc- however My Idea and the license is prohibitive to innovation.

4.7 Summary of Questionnaire

The answers received from the questionnaires provided the researcher with a sample of the feelings and opinions of the employees. In addition to retrieving the sentiments of the sample, the researcher also acquired the level of education, years of service with the company and individual work function of each participant.

The sample expressed some very positive facts and it also aligned with the notion that young people are the driving force behind innovation in enterprises and that a high level of education is necessary for innovation. 45% of the sample were between 26-30. While 60.3% were educated above degree level.

33.3% of the sample had education to master's level, while 27% still had an undergraduate degree. 53.3% had 5-10 years of service in Medtronic. From the sample 40% worked in engineering support.

86.6% of the sample have five years plus service with Medtronic.

55% of the sample stated that the basic salary was the number one stimulant for innovation at work.

80% suggested that there was a strong culture of innovation within the company, while 73% said it was easy to be innovative in their job. 53% acknowledged that innovative actions were all ways rewarded.

42.9% of participants admitted they had never used the 'MyIdeas' tool. 28.6% said they had used it once while another 28.6% said they had used it three or more times.

Chapter 5

5.0 Discussion of Findings

Medtronic exists within a highly dynamic business environment. Innovation and creativity have become crucial for creating competitive advantages for the organisation. Evidence suggests that management do recognise that people are the most vital resource of an innovative organisation. In addition, it is obvious that management are conscious that they have to learn how to manage, motivate and reward the employees in order to prosper.

The author has identified many parallels between the theoretical advancements in the literature review and management practices at Medtronic.

5.1 Human Resources

Many of the findings from the primary research are validated in the literature. Taggar, Sulsky and MacDonald had suggested that the employee sector was the inner core and is most critical in the attainment of an innovative sub-strategy goal. Gerard Kilcommins stated "our success to-date is down to the core competencies and capabilities of our people and our relentless drive for excellence in everything we do". It is evident that senior management are attentive to contemporary philosophies regarding the critical importance of people to the organisation.

5.2 Corporate Culture

Farr and Tran (2008) pointed out that corporate culture is one of the factors that dictate success in innovation. The corporate culture at Medtronic is committed to developing an empowerment culture. This approach has allowed employees to be more forthcoming with idea's which has led to many positive developments.

If the author can assume the practices outlined by Von Stamm, (2008) are effective then evidence suggests that management are pursuing all the right means to nurture the organisation's environment for innovation. Morris stated "we have focused on removing layers between management and employees this involves sharing information, giving more responsibility and power and rewarding their ideas.

The research established that training and resources were made available throughout

the organisation for various process improvement and problem solving tools. However, some respondents in the sample contradicted this and others stated that there is potential for more work in this area.

With reference to Medtronic's inclusion in Ireland's Great Place to Work, the company alludes to a culture of pride and appears partial to highlighting the achievements of the company's own people.

5.3 Medtronic Rewards System

Medtronic operates a total rewards system. The package comprises of pay, benefits, incentives, recognition, wellbeing and career development features. The reward system is continuously evolving and in the future is expected to encompass more of a link between performance/behaviour and reward.

In the survey 55% of the sample stated that the basic salary was the number one stimulant for innovation at work. 13% stated that recognition was the number one motivating factor to be innovative and 10% stated that job satisfaction was the number one motivator. In total these three features of the total rewards package accumulated to 78% of the samples number one stimulant. This evidence suggests that a combination of both extrinsic and intrinsic rewards (granted it's predominantly extrinsic) appears to have a positive effect on the innovative behaviour of employees.

5.4 Conclusion

This author has reviewed all primary and secondary data relating to both innovation and rewards in Medtronic, Galway. The primary objective of this study was to explore the relationship between 'employee innovation' and 'the rewards system' supporting innovation in Medtronic. This author has empirically explored the relationship and has found the following conclusions.

The rewards system in Medtronic is continuously evolving and has consistently adapted the best mechanisms to achieve high levels of employee innovation.

This author reasons that more training should be made available to employees for

innovation programs. Evidence suggests that innovative and creative employees are not utilising internal systems, such as MyIdeas. Perhaps a more robust framework for training could be put in place.

The total rewards system in operation is highly effective. It appears to attract, retain and motivate the workforce.

Evidence suggests that the intrinsic and extrinsic elements of the system are complementary to each other.

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